UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,513	07/18/2003	Tseng-Lu Chien	CHIE3035/BEU	1182

23364 7590 07/22/2005

BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

EXAMINER	
TON, ANABEL	
ART UNIT	**PAPER NUMBER**
2875	

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,513	CHIEN, TSENG-LU	
	Examiner	Art Unit	
	Anabel M. Ton	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Because of their dependency, claims 12-14,16,17,19,20 are necessarily rejected.

3. Claim 11 recites in line 6 "wherein said sealing means makes a chemical resin, particles a liquid or combination of resins, particles and liquids under a variety of different selected conditions or materials, including temperature, pressure, timing, and tooling, and by means of selected processing operations, in to a singe piece and seals the at least one electroluminescent element into a single protective piece". It is not understood what applicant is intending to claim, whether a means for making, a method of making or a utility of the device. With regards to claim 15, it is unclear what applicant is defining as "material made from animal into plastic". In claim 18 applicant recites "seals the at least one electro luminescent element into the single protective piece", this recitation is a sentence fragment and there is no antecedent basis for "single protective piece", furthermore, applicant recites again " a single protective piece" it is unclear if this is an additional protective piece or if applicant is referring to the same protective piece.

4. In line 18 of claim 11, applicant recites, "Conductive means includes at least one of a wire, ribbon, flexible printed circuit board and electrodes". Applicant has not clearly

stated if the conductive means include all of these elements or some of these elements. Claim 15 recites "said plastic piece includes a material made from petroleum, a tree, or an animal into plastic, rubber, PVC PE, PP, PU, POLY, PC, PS in particle, resin, or liquid form", applicant has not identified any of these abbreviations in the specification, and it is unclear if the plastic piece includes all of these elements or some of these elements.

5. Claim 11 recites the limitation "said plastic piece" in 19. There is insufficient antecedent basis for this limitation in the claim. Applicant has not recited this limitations anywhere previously in the claim. Applicant recites "said plastic piece is arranged to enable connection of the conductive means with the circuit and power source to obtain desired light functions and features", it is unclear how the plastic piece is arranged to enable connection of the conductive means with the circuit and power source since this suggests that the plastic piece is somehow electrically conductive. The applicant does not provide how this plastic piece enables an electrical connection other than showing that the plastic piece supports the EL device as shown in figures 1-8.

6. Claims 11 and 18 recite " means of selected processing operations" and "formed under a variety of selected conditions and materials for sealing", respectively. It is unclear what these means of selected processing operations and selected conditions and materials for sealing are since applicant has not properly defined them in the claim.

7. As best understood the following rejection applies.

Claim Objections

8. Claim 18 is objected to because of the following informalities: Applicant claims a "busses wire", "buss" should be spelled "bus". Appropriate correction is required.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 11- are rejected under 35 U.S.C. 103(a) as being unpatentable over Pennaz et al (6,639,355).

11. Pennaz discloses the claimed invention except for the recitation of the protective piece exhibiting optical effects that vary an appearance of the light emitted by the arrangement, the optical effects vary at least one of an image color brightness clearance size, and direction of light emitted by the at least one EL element. Pennaz discloses at least one EL element with a plastic sealing means (98,transparent laminate, lacquer or the like, col. 4 lines 22-35), having a desired light output including at least one color and a desired brightness (col. 5 lines 33-50), design and geometric shape together (fig 3) with conductive means for supplying electricity (28,29, the EL element being sealed by sealing means within a single protective layer (98), the sealing means is made by means of selected processing operations into a single piece and

then seals at least one EL element into a single protective piece (inherent since the seal must be formed into a single piece before being able to seal the EL element), the conductive means includes at least one of a wire, ribbon flexible printed circuit board and electrodes of the at least one EL (28,29,20) element and a plastic piece is arranged to enable connection of the conductive means with the circuit and power source in or to obtain desired light functions and features .

12. With regards to the protective piece being plastic, Pennaz discloses the piece being a transparent laminate, lacquer or the like. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the transparent laminate of Pennaz to be a plastic since it is old and well known in the illumination art, particularly in EL lighting applications for a transparent laminate that laminates an EL device on a top and bottom outer surface to be plastic since plastics are known for their durability, optical properties and cost effectiveness in illumination applications such as the one of Pennaz. With regards to the transparent laminate of Pennaz sealing the EL lamp structure, it would have been obvious to one of ordinary skill in the art at the time the invention was made for this laminate to do so since Pennaz discloses that this laminate protects the EL lamp structure from adverse environmental conditions. If a seal were not present in this laminate, the laminate would be ineffective in protecting the EL lamp structure from adverse environmental conditions.

With regards to the protective piece/ laminate of Pennaz exhibiting optical effects that vary an appearance of the light emitted by the arrangement, the optical effects vary at least one of an image color brightness clearance size, and direction of light emitted

by the at least one EL element, It would have been obvious to one of ordinary skill in the art at the time the invention was made to include optical effects in the protective transparent laminate of Pennaz, since the courts have stated that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

- With regards to the processing operations being injection by machine and manual pouring at selected times, Pennaz discloses "all of the aforementioned layers can be applied by ionic charge deposition, vacuum deposition, printing, spraying, dipping, or the like. Injection by machine is considered to be anticipated by "spraying" since spraying requires an injection process by a machine to spray on a desired location/surface. With regards to "manual pouring at selected times" Pennaz's teaching of "or the like" in the aforementioned teaching is considered to anticipate this limitation since "manual pouring at selected times" suggests pouring selectively into a mold which can be reasonably considered to fall under "or the like" since molding a laminate on a surface by use of a mold is old and well known in the illumination art.
- The at least one EL panel is a bent or sheet or twisted panel (ribbon), bent element (rolled) installed within a protective piece.
- The EL element has a transparency or thickness or color to vary the image size brightness or color (color is transparent, thickness is shown in fig 2, and brightness is dependent on light emission from the EL device)

- With regards to the materials in claim 15, since applicant has not identified any of these abbreviations, and in pp 4 of applicant's specification applicant states that "any chemical, resin particles or liquid that enables the EL element to be sealed inside to provide environment proof properties may be used", Pennaz's laminate is considered to anticipated these materials.
- Additional lighting means, figure 3, ref. Num. 10 identifies multiple EL lamps anticipating this limiation.
- With regards to the plastic piece further comprising a surface treatment including masking cut outs, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the device of Pennaz include a cut out for the purpose of providing the EL device with an indicia means since such a practice is old and well known in the illumination art (see cited prior art Hoffman for teaching);

13. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pennaz et al and further in view of Hay (5,711,594).

14. Pennaz discloses the claimed invention except for the recitation that the EL element is twisted. Pennaz discloses at lest one EL (10) element having a center buss wire (col. 5 lines 29-33) which delivers a predetermined electric signal having a desired voltage, frequency and current from one end to another (inherent), electrodes (38) of at least one EL element connected to the bus wire (inherent since the bus bars provide electrical power to the electrodes which in turn initiate the EL lighting device) conductive means for connecting the bus wire with an outside signal source (inherent since all EL

light devices must have leads extending from the lighting device to connect to an exterior power source), at least a seal for providing the EL element with a single protective piece(98) , the single protective piece formed under a variety of selected conditions and materials (col. 6 lines 11-13) for sealing the electroluminescent element and electrodes. Hay discloses an EL device that is twisted around a mandrel to provide a 360-degree radiating view. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Hay's teaching of a wound EL lighting device in the invention of Pennaz since as taught by Hay, such an embodiment is purposeful for providing a 360 degree illuminated view of the device. Furthermore, since Pennaz discloses a bus bar on a front and rear side, inherently Pennaz, when twisted, would twist around the bus bars provided in the lighting device.

15. With regards to the conducting means including an electrical socket, It would have been obvious to one of ordinary skill in the art at the time the invention was made for Pennaz's conductive means to include an electrical socket since it is old and well known in the art for EL devices to include power sources remote from the device that would require the electrical leads of the EL device to plug into/be connected to socket of the remote power sources to provide power to the EL device. (For teaching see Hoffman, 44); with regards to the socket being connected to a plurality of EL elements, It would have been obvious to one of ordinary skill in the art at the time the invention was made for the sockets to be connected to a plurality of EL elements since electrical leads, which are inherent in all EL elements, are considered EL elements and are in

turn would be connected to the sockets of an electrical power source. (See cited art Hoffman (28)).

Response to Arguments

16. Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection. Furthermore applicant has cancelled previous claims 1-10 and added new claims 11-20, which are rejected for the reasons as stated above.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoffman (5,533,289).

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M. Ton whose telephone number is (571) 272-2382. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anabel M Ton
Examiner
Art Unit 2875

AMT

Stephen Husar
Primary Examiner